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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/982,243

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Ashish Prakash

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10/05/2006

NETWORK APPLIANCE/BLAKELY  
12400 WILSHIRE BLVD  
SEVENTH FLOOR  
LOS ANGELES, CA 90025-1030

EXAMINER

CHOUDHURY, AZIZUL Q

ART UNIT

PAPER NUMBER

2145

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/982,243

Applicant(s)

PRAKASH ET AL.

Examiner

Azizul Choudhury

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-34,36,38 and 39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-34,36,38 and 39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____                                                         | 6) <input type="checkbox"/> Other: _____                          |

***Detailed Action***

This office action is in response to the correspondence received on June 30, 2006.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-34, 36 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huckins (US Patent No: 5,612,898) in view of Heilmann et al (US Patent No: 6,760,420), hereafter referred to as Huckins and Heilmann, respectively.

1. With regards to claim 21, Huckins teaches through Heilmann, a device to log information in a network cache, the device comprising: an interface to allow selection of a protocol, selection of some or all of a plurality of fields of the protocol that may be present in a messages to be received for logging, and specification of a sequence in which the selected fields are to appear in a log file; a first data structure for storing a value indicating a position in the user specified sequence for each selected field; a protocol independent log module to receive information from an application module, to store the information in a second data structure, and to store a reference to the information for each selected field stored in the second data structure in a location of a third data structure that

corresponds to the position in the specified sequence for the corresponding field; and a log file wherein the information for each selected field from the second data structure is sequentially written using the reference from the third data structure (Huckins teaches a design that allows for a user to log protocol specific details (column 2, lines 21-30, Huckins). The monitoring by which the logging occurs is customizable by the user (column 2, lines 31-34, Huckins). The design also allows for the logging of only select, desired features (column 7, lines 7-23, Huckins). This includes the manner in which the monitored data is displayed (column 2, lines 31-41, Huckins). In addition, it is inherent that since data is being handled and managed, that data structures are used to store, transfer and manipulate data with. One such example of a data structure is the PDU (protocol data unit) (column 5, lines 16-40, Huckins). However, while Huckins teaches that the logged data can be viewed in various formats (column 2, lines 39-42, Huckins), Huckins does not explicitly state that the logged data is put in a sequence/order.

In the same field of endeavor, Heilmann teaches how logged data can be sorted/ordered and the display of the logged data can be formatted (column 9, lines 49-55, Heilmann). It would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Huckins with those of Heilmann's, for the purpose of controlling and logging access between end-user stations (column 1, lines 30-31, Heilmann)).

2. With regards to claim 22, Huckins teaches through Heilmann, the device of claim 21, wherein the application module is protocol specific and obtains information for each selected field associated with the message (The Huckins design is protocol specific and provides protocol specific events (column 2, lines 21-31, Huckins). The display of the information is customizable (column 2, lines 31-41, Huckins)).
3. With regards to claim 23, Huckins teaches through Heilmann, the device of claim 21, wherein the interface allows the creation of new fields in addition to the plurality of fields (Huckins' design allows for the select enabling and disabling of logging of desired features (column 6, line 25 – column 7, line 23, Huckins). The data to be displayed is customizable (column 2, lines 31-41, Huckins)).
4. With regards to claim 24, Huckins teaches through Heilmann, the device of claim 21, wherein each location in the first data structure is pre-initialized to contain a flag before the specified sequence is stored, the flag being utilized as an indicator that the corresponding field was not selected for logging (The initialization of data structures is inherent. Without doing so, programs run the risk of contaminating the data stored within the data structure, during execution of the program. In addition, the Huckins' design allows for an initialization process to setup the design to monitor the designated traits (column 6, lines 12-24, Huckins)).

5. With regards to claim 25, Huckins teaches through Heilmann, the device of claim 21, wherein the interface is a graphical user interface (Huckins' design can be implemented in Windows™ (column 4, lines 49-61, Huckins)).
6. With regards to claim 26, Huckins teaches through Heilmann, the device of claim 21, wherein the interface is a command line interface (Huckins' design allows for the outputting of the data as text (column 5, lines 7-22, Huckins)).
7. With regards to claim 27, Huckins teaches through Heilmann, a method of logging information in a network cache, the method comprising: providing a an interface to allow selection of some or all of a plurality of fields that may be present in a message to be received for logging and specification of a sequence in which the selected fields are to appear in a log file; storing in a first data structure a value indicating the position in the specified sequence of each selected field; in response to a message received over a network from a remote node, obtaining information for each selected field associated with the message and storing the information in a second data structure, in a sequence independent of the specified sequence, storing in a third data structure, based on the first data structure, a reference to the information for each selected field stored in the second data structure, including storing each reference in a location of the third data structure that corresponds to the position in the specified

sequence of the corresponding field; and using the third data structure to output the information for each selected field in the second data structure to a log file, such that the information for each selected field appears in the log file according to the specified sequence (Huckins teaches a design that allows for a user, who is remote to the site being monitored to log protocol specific details (column 2, lines 21-30, Huckins). The monitoring by which the logging occurs is customizable by the user (column 2, lines 31-34, Huckins). The design also allows for the logging of only select, desired features (column 7, lines 7-23, Huckins). This includes the manner in which the monitored data is displayed (column 2, lines 31-41, Huckins). In addition, it is inherent that since data is being handled and managed, that data structures are used to store, transfer and manipulate data with. One such example of a data structure is the PDU (protocol data unit) (column 5, lines 16-40, Huckins). In addition, Huckins teaches that the logged data can be viewed in various formats (column 2, lines 39-42, Huckins)).

8. With regards to claim 28, Huckins teaches through Heilmann, the method of claim 27, wherein the interface allows creation of new fields in addition to the plurality of fields (Huckins' design allows for the select enabling and disabling of logging of desired features (column 6, line 25 – column 7, line 23, Huckins). The data to be displayed is customizable (column 2, lines 31-41, Huckins)).

9. With regards to claim 29, Huckins teaches through Heilmann, the method of claim 27, wherein the information for each field is converted to an ASCII representation and is of variable length (Huckins allows the data to be displayed in ASCII (column 5, lines 17-22, Huckins)).
10. With regards to claim 30, Huckins teaches through Heilmann, the method of claim 27, wherein each location in the first data structure is pre-initialized to contain a flag before the specified sequence is stored, the flag to be utilized as an indicator that the corresponding field was not selected for logging (The initialization of data structures is inherent. Without doing so, programs run the risk of contaminating the data stored within the data structure, during execution of the program. In addition, the Huckins' design allows for an initialization process to setup the design to monitor the designated traits (column 6, lines 12-24, Huckins)).
11. With regards to claim 31, Huckins teaches through Heilmann, the method of claim 27, wherein the second data structure and the third data structure are created to respond to logging for the message and destroyed once logging for the message is completed (It is inherent that since data is being handled and managed, that data structures are used to store, transfer and manipulate data with. One such example of a data structure is the PDU (protocol data unit) (column 5, lines 16-40, Huckins). Plus, it is also inherent that memory



management means (creating and deleting data structures at the appropriate times) are applied to prevent crashing a computer due to using up all the available memory).

12. With regards to claim 32, Huckins teaches through Heilmann, the method of claim 27, wherein the first data structure persists through logging for a plurality of messages received from remote nodes (It is inherent that since data is being handled and managed, that data structures are used to store, transfer and manipulate data with. One such example of a data structure is the PDU (protocol data unit) (column 5, lines 16-40, Huckins)).

13. With regards to claim 33, Huckins teaches through Heilmann, the method of claim 27, wherein using the third data structure to output the information further comprises sequentially accessing the third data structure to read the position of the information corresponding to each selected field and accessing the second data structure to read information corresponding to each selected field at the position indicated by the reference (It is inherent that since data is being handled and managed, that data structures are used to store, transfer and manipulate data with. One such example of a data structure is the PDU (protocol data unit) (column 5, lines 16-40, Huckins)).

14. With regards to claim 34, Huckins teaches through Heilmann, a device for logging information in a network cache, the device comprising: an interface to allow selection of a protocol, selection of some or all of a plurality of fields of a message to be received for logging, the fields corresponding to the selected protocol, and specification of a sequence in which the selected fields are to appear in a log file; a protocol specific application module to obtain information for each selected field associated with the message; a protocol independent log module to receive information for each selected field from the protocol specific application module and to store the information for each selected field in a log file in the sequence specified (Huckins teaches a design that allows for a user to log protocol specific details (column 2, lines 21-30, Huckins). The monitoring by which the logging occurs is customizable by the user (column 2, lines 31-34, Huckins). The design also allows for the logging of only select, desired features (column 7, lines 7-23, Huckins). This includes the manner in which the monitored data is displayed (column 2, lines 31-41, Huckins). In addition, Huckins teaches that the logged data can be viewed in various formats (column 2, lines 39-42, Huckins)).

15. With regards to claim 36, Huckins teaches through Heilmann, the device of claim 35, wherein the interface allows creation of new fields in addition to the plurality of fields (Huckins' design allows for the select enabling and disabling of logging

of desired features (column 6, line 25 – column 7, line 23, Huckins). The data to be displayed is customizable (column 2, lines 31-41, Huckins)).

16. With regards to claim 38, Huckins teaches through Heilmann, the device of claim 35, wherein the interface is a graphical user interface (Huckins' design can be implemented in Windows™ (column 4, lines 49-61, Huckins)).

17. With regards to claim 39, Huckins teaches through Heilmann, the device of claim 35, wherein the interface is a command line interface (Huckins' design allows for the outputting of the data as text (column 5, lines 7-22, Huckins)).

18. The motivation applied to claim 21 is applicable to claims 22-34, 36 and 38-39.

### ***Remarks***

The amendment received on June 30, 2006 has been carefully examined but is not deemed fully persuasive. In lieu of the claim amendments and the arguments, the 112-type rejection has been withdrawn and the 102-type rejection has been changed to a 103-type rejection. The following are the examiner's response to the concerns expressed within the remarks portion of the amendment.

The first point of contention involves the claim trait of "selection of some or all of a plurality of fields of a message to be received for logging." The applicant contends that this trait is not taught by Huckins. The examiner disagrees with this assertion.

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Huckins teaches in column 2, lines 31-34 that the user is able to customize what is logged, this includes what elements should not be logged (column 7, lines 7-23, Huckins).

The second point of contention involves the claim traits of "specification of a sequence in which the selected fields are to appear in a log file." The applicant contends that Huckins does not teach such a trait. Huckins does teach that the logged data can be displayed in various selectable formats (column 2, lines 39-42, Huckins). However, Huckins does not explicitly state that the logged data is put in a sequence/order. In the same field of endeavor, Heilmann teaches how logged data can be sorted/ordered and the display of the logged data can be formatted (column 9, lines 49-55, Heilmann).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC

  
JASON CARDONE  
SUPERVISORY PATENT EXAMINER